

Forest Based Economic Development: A Needs Assessment

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ABSTRACT

Recognizing the potential for forest based economic rejuvenation of rural areas in Pennsylvania, state government mandated a target industry program for encouraging wood-based industries. A 21-member Hardwoods Development Council was established. One of the first activities of the Council was to assess the needs of industry and develop a forward looking, coordinated approach to expansion. Outside consultants with expertise in the broad arena of forestry, forest products, and economic development were brought in to identify key constraints and opportunities affecting the program.

Results of the Needs Assessment process, and recommendations for action, were organized into four topical areas. Identified was the need to Define a Strategy that included the intent of the authorizing legislation but with a broadened focus. The competitive advantage of Pennsylvania, compared to other states, appeared to lie closer to the resource than the original emphasis on secondary processing. Overcoming Institutional Constraints was the focus of a second set of recommendations. There is a need for stronger leadership, more coordination of programs, and new forms of cooperation. Regulatory issues need to be clearly defined and problems resolved. Maintaining and Upgrading the Resource presented a host of problems that differ by land ownerships. Some common themes, however, were the need for better data on utilization, questions on the impact of white tailed deer management on regeneration of future forests, and the general lack of professional management on non-industrial private lands. The fourth group of recommendations centered on the opportunity to Achieve Success In Global Markets.

INTRODUCTION

Employment in the forest products industry in Pennsylvania has increased over 7% in the 1980s while employment in the faltering manufacturing sector as a whole has decreased over 30% (Fuller, 1989). Rural communities have been hit especially hard by the decline in manufacturing, coming as it does after declines in coal and petroleum. The hardwood industry is a bright light in the otherwise depressed resource based sector. Recognizing the potential for forest based economic rejuvenation, the Pennsylvania state government mandated a target industry program for encouraging the wood-based industry, called the Hardwood Initiative (Anon, 1989).

The Pennsylvania Hardwood Initiative is a target industry program that singles out the hardwood industry for increased attention from state economic developers. A 21-member Hardwoods Development Council was established in the Department of Commerce. One of the Council's first activities was to assess the needs of industry and develop a forward-looking, coordinated approach to expansion of the industry. Outside consultants with expertise in the broad arena of forestry, forest products, and economic development were brought in to identify key constraints and opportunities affecting the Initiative.

BACKGROUND

Motivation

Motivation for the Pennsylvania Hardwood Initiative came from increasing international and domestic demand for the species and grades of logs and lumber available from the forests of the Commonwealth (Department of Commerce, 1989). This came at a time when the high quality hardwood forests of Pennsylvania were maturing, and a growing industry was creating jobs in the otherwise stagnant rural areas of the state.

The hardwood forest in Pennsylvania is relatively even-aged, resulting from heavy cutting of the old-growth, mostly softwood forest in the period from 1880 to 1920. The forest of the northern tier of counties is northern hardwood type, with a heavy component of highly valued black cherry. The forest of the southern two-thirds of the state is oak type; red and white oaks vie for highest stumpage value and account for most of the growth in hardwood lumber exports.

Dwindling export supplies of primary species of tropical hardwoods and increasing costs due to export restrictions in producing countries have shifted demand toward temperate hardwood species (Wisdom, 1988). Demand for United States hardwoods is expected to increase 2% per year through this century (Luppold and Araman, 1988). Pennsylvania leads all states in production of hardwood lumber, and has the greatest volume of hardwood growing stock (Strauss and Lord, 1989). While it is only second in sawtimber volume of all hardwood species, the state ranks first in volume of select export species which are in greatest demand (Araman, Personal Communication, 1989).

Legislation

The legislation that created the Hardwood Initiative (Senate Bill 945, Session of 1987) said to target the hardwood industry and to concentrate on creating new jobs. The Hardwoods Development Council was created to provide a forum for interested parties to come together and recommend policy and programs to support expansion of the industry. A development strategy was suggested in the legislation: concentrate on expanding the secondary processing industry. This reflected the concern of many in the primary processing industry and economic development community that most of the highest quality logs and hardwood lumber were exported from the state, and that Pennsylvania should benefit from capturing more value-added processing within the state.

Another strategic concern in the legislation was the need to develop new products and processes from low quality logs, where low quality was due to small size, defect, or low value species. This prescription recognized the need to expand markets for the low quality material that must be harvested along with the high quality logs to assure good forest management.

The legislation assigned operational responsibility for the Initiative to the Department of Commerce. The Department was to carry out this mandate by coordinating delivery of state programs to industry and by promoting expansion of exports.

Hardwood Initiative

The state legislature funded the Hardwood Initiative, with an appropriation of \$500,000 for the first year. The 21-member Hardwoods Development Council was initiated within the Department of Commerce to advise the Governor, the Secretary of Commerce, and the General Assembly on expansion of the industry. The Council works through five Committees, shown in Table 1.

Table 1. Hardwoods Development Council Committee Structure

- Resource Analysis
- Education
- Market Analysis and Product Development
- Manufacturing Technology
- Regulations

The Department of Commerce retained its traditional role of promoting the industry and the state, recruiting hardwood firms from out of state, and providing financing assistance. A position of Hardwood Coordinator was established on the Governor's Response Team to coordinate delivery of state programs (this position is described in detail in Kennedy's paper in this proceedings).

Under contract with the Department, and at the direction of the Secretary of Commerce, faculty within the School of Forest Resources at the Pennsylvania State University are managing other aspects of the Hardwood Initiative. Dr. Benjamin A. Jayne is the Executive Director of the Hardwoods Development Council, and Dr. Stephen B. Jones is Assistant Director. They manage the market analysis, research, and education/technology transfer aspects of the program. Nearly \$250,000 in research are under contract.

Six regional Hardwood Utilization Groups were partially funded by the Council. The role of these groups and how they originated are described by Anderson (in this proceedings).

NEEDS ASSESSMENT PROCESS

Site Visits

The needs assessment process began with a series of site visits by outside consultants with broad expertise in forestry, forest products, and economic development. The two- or three-day visits began in April and finished in June of 1989, early in the life of the Council. Each visitor gave seminars at University Park and in Harrisburg. The visitors met less formally with faculty and others at Penn State, with industry and economic developers, and with agency staff and legislators. Several of the visitors met with industry at other locations than Penn State or the Capitol. The visitations are summarized in Table 2.

Also part of the process were the management team (Jayne and Jones) and a project analyst (the author). The role of the project analyst was to participate in all seminars, meetings, and discussions during the site visits, and to write a summary report.

Reports

Each visitor prepared a report after he or she returned home and reflected on his or her visit. Those reports, and notes taken during the visits by the project analyst, were the basis of the summary Needs Assessment Report.

The Needs Assessment Report (Stanturf, 1989) has been presented to the Hardwoods Development Council. It will form a part of the biannual report of the Council to the Governor and legislature. The management team will present the results in a series of public meetings. The report and the recommendations included in it will be widely discussed and considered by the Council.

Table 2. Needs Assessment Visitations

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- Dr. Lloyd Irland, President, The Irland Group, Augusta, ME. "Forest Based Economic Development: Marketing, Policy, and Management Implications". April 25-27, 1989.
 - Dr. Henry Huber, Professor, Extension Specialist in Forestry, Michigan State University, East Lansing, MI. "The Problem of Yield". May 2-3, 1989.
 - Mr. Robin Bertsch, Chief, Forest Industry Department, Michigan Department of Natural Resources, Lansing, MI. "Interagency Cooperation: The Key to Michigan's Forest Based Economic Development Program". May 9-10, 1989.
 - Dr. Harold Wisdom, Professor, Forest Products Economics, Virginia Polytechnic University, and Dr. Philip Araman, Marketing Specialist, USDA Forest Service Southeastern Forest Experiment Station, Blacksburg, VA. "International Trade in Hardwood Forest Products and the Economic Forces Driving It". May 16-17, 1989.
 - Dr. Daniel Cassens, Professor, Forest Products, Purdue University, West Lafayette, IN. "The Role of Education and Technology Transfer in Forest Based Economic Development". May 24-25, 1989.
 - Dr. John Currier, Assistant Director, Northeast Region State and Private Forestry, USDA Forest Service, Broomall, PA; and Dr. Edward Pepke, Marketing Specialist, USDA State and Private Forestry, St. Paul, MN. "Interstate Cooperation: A Regional Approach to Forest Based Economic Development". May 30-June 1, 1989.
 - Dr. Perry Hagenstein, President, Resources Issues Inc., Wayland, MA. "Competition in Hardwoods Market Development". June 13-14, 1989.
 - Dr. Jean Mater, Vice-President, Mater Engineering, Corvallis, OR. "Developing A Strategic Marketing Plan for the Hardwood Forest Products Industry". June 19-21, 1989.
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RESULTS

Define a Strategy

The Needs Assessment identified the need for a clearly defined strategy that included the job creation intent of the legislation, with the emphasis on retention and expansion of existing industry. One recommendation was to broaden the focus of the Initiative to include all segments of the forest products industry, including the paper and allied products sector which does not rely totally, or in some cases at all, on hardwood raw material. The need to recognize non-timber users of the forest was recommended as well, including adding three members to the Council from the environmental community.

~~It became clear during the process that Pennsylvania's competitive advantage probably was closer to~~ the resource base than the original focus on secondary processing. There was a need to recognize that the state's positive attributes do not in themselves constitute a *competitive* advantage. These attributes include a high quality resource, proximity to major markets, and an ocean port. Industry is in place at all levels of the marketing chain, with pallet and pulp industries as markets for low-grade material, and growing kiln drying capacity. Political enthusiasm is evident, and the state has sophisticated economic development programs and delivery system, as well as an active school of forestry. Much of further effort will be needed, however, to define competitive advantage, and it has begun with the contract research.

Industry needs have been identified that the state government can appropriately address. The top three in descending order are entrepreneurship skills enhancement, market information and research, and labor and management training. The latter two areas are already being addressed by several of the applied research projects under contract.

Overcome Institutional Constraints

The second group of recommendations concerned institutional constraints. With a fragmented industry, strong leadership for the forestry and forest products community is lacking in Pennsylvania. Recommendations were made to strengthen the capabilities of state government and the universities, and to enhance the development of leadership from the private sector.

Not surprisingly, there are regulatory concerns that affect the primary industry, and others that affect secondary processors. The Needs Assessment Report recommended that state government make a commitment to a fact-finding and dispute resolution process; that key issues be addressed, one by one; and that when possible, these issues be resolved.

Agencies and actors at the state, regional, and local levels need to be coordinated. The Report recommended a review of existing state economic development programs, and appropriate action to aggressively promote effective programs and to fix weak ones. New forms of cooperation within industry need to be fostered. A Mid-Atlantic forestry alliance with other Appalachian hardwood states should be explored. The purpose of an alliance would be to promote the common resource attributes of the region. Increased public awareness and support for the forest products industry is needed. A program should be developed to highlight the renewable nature of forests, the importance of proper management to forest health, and the multitude of benefits provided by the forests.

Maintain and Upgrade the Resource

In order to maintain and even upgrade the quality of Pennsylvania's forest, decisionmakers need better data on the resource and its utilization. A difference of opinion exists among specialists as to whether the increase in growing stock and sawtimber (volume expected in the forest inventory results next year) will include an increase in log quality in the select export species. Opinions also differ on the importance of the effect of white tail deer on regeneration following harvest cutting, and whether this has widespread implications for future timber supply.

With more than 70% of the commercial forest land owned by almost half a million private non-industrial owners, future supply of quality timber is largely in their hands. More than 80% of the timber harvested on private land in Pennsylvania is without professional assistance (Jones, 1989). Landowners are sold on diameter limit cuts which in practice result in removal of the highest value, fastest growing trees. It is imperative that state programs target them with educational and technical assistance programs aimed at land stewardship and forest management. The advantages of actively managing their land for wildlife, recreation, aesthetics, and timber need to be presented.

Achieve Success In Global Markets

The forest products industry in Pennsylvania is part of a global market, whether or not firms are themselves exporting products. Success in the global marketplace should be an objective of the Hardwood Initiative, as export demand is growing faster than domestic, at least for primary products.

Whatever the markets, agencies can help firms to export. One recommendation was to explore creation of a wood products export trading company. Another recommendation was to provide even more direct marketing assistance to firms, and to help firms develop products for specific overseas markets. Firms need assistance to develop new products or to modify existing products so that they meet the special needs of foreign buyers.

CONCLUSION

The Needs Assessment process, combined with other ongoing activities of the Hardwoods Development Council and state agencies, has provided in an ambitious agenda for all segments of the forestry community and the forest products industry. This agenda, with strategic action, policy, research, and education components, will be adjusted and revised over time but it provides an initial targeting of effort for the public and private actors in the Hardwood Initiative. The Needs Assessment process helped to rearrange some priorities; confirmed initial assessments of the importance of some factors; and helped participants to focus on critical questions and needs.

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